

CLAIMS

1. A distributor plate for an impelling rotor of a
5 rotating shaft impactor, where the impelling rotor is a
chamber arranged in use to rotate about an axis and to
radially eject material received therein through one or
more ejection ports in a side wall of the chamber,
wherein the distributor plate includes a body and a
10 single wear element only, the wear element being
positioned on the body to cover an outer surface of the
body onto which the material would otherwise be received.
2. A distributor plate as claimed in claim 1 wherein the
15 outer surface of the wear element is substantially
planar.
3. A distributor plate as claimed in claim 1 or claim 2
wherein a surface of the wear element is affixed to a
20 mating surface of the body.
4. A distributor plate as claimed in claim 3 wherein the
mating surface is substantially planar.
- 25 5. A distributor plate as claimed in any one of the
preceding claims wherein the wear element is a plate.
6. A distributor plate as claimed in claim 5 wherein the
wear element is a circular disc.
- 30 7. A distributor plate as claimed in any one of the
preceding claims wherein the wear element is made of a
wear resistant material.

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8. A distributor plate as claimed in any one of the preceding claims wherein the body includes a projection at its peripheral edge which is used to locate the wear element on the body.
9. A distributor plate as claimed in claim 8 wherein the projection is a peripheral lip.
10. A distributor plate as claimed in any one of the preceding claims wherein the wear element is spaced from the body by one or more spacers arranged between opposing mating surfaces of the body and the wear element so that, when the wear element is attached to the body by use of an adhesive substance, the spacer(s) provide a predetermined depth of the adhesive substance between the body and the wear element.
11. A distributor plate as claimed in claim 10 wherein one such spacer is a projecting ring on the body, concentric with a central axis of the body and inset from the peripheral edge of the body.
12. A distributor plate as claimed in any one of the preceding claims wherein a second peripheral edge of the body is bevelled in at least one position, the bevelled edge adapted for the insertion of a levering tool to facilitate movement of the distributor plate.
13. A distributor plate as claimed in claim 12 wherein the entire second peripheral edge is bevelled.

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14. A distributor plate for an impelling rotor of a rotating shaft impactor, the distributor plate including a wear element positioned on a body, the wear element spaced from the body by one or more spacers arranged between facing surfaces of the body and the wear element so that, when the element is attached to the body by use of an adhesive substance, the spacer(s) allow for a predetermined depth of the adhesive substance between the body and the wear element.
15. A distributor plate for an impelling rotor of a rotating shaft impactor, where the impelling rotor is a chamber mountable via a coupling element to a shaft of the impactor and arranged in use to rotate about an axis and to radially eject materials received therein through one or more ejection ports in a side wall of the chamber, wherein the distributor plate has a basal spigot, with a cavity in the spigot for receiving the coupling element therein in use.
16. A distributor plate for an impelling rotor of a rotating shaft impactor, where the impelling rotor is a chamber arranged in use to rotate about a rotating axis and to radially eject materials received therein through one or more ejection ports in a side wall of the chamber, wherein at least part of a peripheral edge of the distributor plate is bevelled for the insertion of a levering tool to facilitate movement of the distributor plate.
17. A distributor plate for an impelling rotor of a rotating shaft impactor, where the impelling rotor is a chamber arranged in use to rotate about a rotating axis

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and to radially eject materials received therein through one or more ejection ports in a side wall of the chamber, the distributor plate including a wear element positioned on a body and either of an opposing surface of the body
5 or the wear element including a projection which locates the wear element on the body.

18. A distributor plate as claimed in claim 17 wherein the projection is located at the edge of the body and around
10 its periphery.

19. A mounting for supporting a distributor plate in an impelling rotor of a rotating shaft impactor, where the impelling rotor is a chamber arranged in use to rotate
15 about an axis and to radially eject materials received therein through one or more ejection ports in a side wall of the chamber, the distributor plate having a multi-sided basal spigot receivable in a multi-sided recess in the mounting, wherein the number of sides of the recess
20 is a multiple greater than one of the number of sides of the spigot.

20. A mounting as claimed in claim 19 wherein the mounting is incorporated in a plate on which the distributor plate
25 rests.

21. A mounting as claimed in claim 19 wherein the mounting is incorporated in a rotatable shaft of the rotating shaft impactor.

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22. A mounting plate as claimed in any one of claims 19 to 21 wherein the recess is a twelve-pointed star shaped

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hole having twenty four sides and the basal spigot has six sides.

23. An impelling rotor of a rotating shaft impactor
5 including a distributor plate as defined in any one of claims 1 to 18.

24. An impelling rotor of a rotating shaft impactor
including a mounting as defined in claims 19 to 22.
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25. A rotating shaft impactor including a distributor
plate as defined in any one of claims 1 to 18.

26. A rotating shaft impactor including a mounting as
15 defined in claims 19 to 22.